BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

BYATARAYANAPURA DIVISION

KODIGEHALLI SUB DIVISION

Name of Work: Improvements of Roads and Drains at C.P.Layout and Devinagar and Surrounding Area in Ward No.11, Kodigehalli, Kodigehalli Sub Division

EST.COST : Rs.125.00 Lakhs

P-Code : P0541

BRUHAT BANGALORE MAHANAGARA PALIKE

Name of Work: Improvements of Roads and drains at C.P. Layout and Devinagar and surrounding area in ward no.11, Kodigehalli sub division

Estimate Cost : 125.00 Lakhs

Sl No.	Description of Work	Unit	Nos	Dimensions			Qty	Rate	Amount
				L (m)	B (m)	D (m)			
1	Removing and resetting of Footpath slab (Data Rate)								
	Data Rate	**235.00**							
	Total Rate	**235.00**							
	For Drain								
	1st cross from Jalageramma Temple road								
	LHS		1	150.00	0.90		135.00		
			1	30.00	0.75		22.50		
	RHS		1	100.00	0.90		90.00		
			1	30.00	0.75		22.50		
	2nd cross from Jalageramma Temple road								
	LHS		1	200.00	0.90		180.00		
	RHS		1	170.00	0.90		153.00		
	3rd cross from Jalageramma Temple road								
	LHS		1	170.00	0.90		153.00		
	RHS		1	200.00	0.90		180.00		
		Sqm					**936.00**		
	Deduct 30% Missing / Broken Slabs						280.80		
		Sqm				**Total**	**655.20**	**235.00**	**153972.00**
2	Removing and resetting of precast kerb stones fixed with CM 1:3 fixed and finished in line as per direction of Engineer in charge. (The cost of PCC shall be paid extra) (KPWD 2023-24, Volume-3, Item No.10.17, Page No.95)								
	Basic Rate	**35.00**							
	Area weightage 10%	3.50							
	Total Rate	**38.50**							
	2nd cross from Jalageramma Temple road								
	LHS		1	170.00			170.00		
		m				**Total**	**170.00**		
	Deduct 30% Missing / damaged Kerbs						51.00		
		m				**Total**	**119.00**	**38.50**	**4581.50**
3	Earth work excavation by manual means In all kinds of soils Depth upto 1.5 m for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. (KPWD 2023-24, Volume-1, Item No.1.4.1, Page No.5)								
	Basic Rate	**242.00**							
	Area weightage 10%	24.20							
	Total Rate	**266.20**							
	Desilting								

Sl No.	Description of Work	Unit	Nos	Dimensions			Qty	Rate	Amount
				L (m)	B (m)	D (m)			
	2nd cross from Jalageramma Temple road								
	LHS		1	200.00	0.50	0.40	40.00		
	For RCC drain								
	1st cross from Jalageramma Temple road								
	LHS		1	203.00	1.20	0.90	219.24		
			1	30.00	0.85	0.90	22.95		
	RHS		1	203.00	1.20	0.90	219.24		
			1	30.00	0.85	0.90	22.95		
	2nd cross from Jalageramma Temple road								
	RHS		1	200.00	1.20	0.90	216.00		
	3rd cross from Jalageramma Temple road								
	LHS		1	200.00	1.20	0.90	216.00		
	RHS		1	200.00	1.20	0.90	216.00		
		Cum				**Total**	**1172.38**	**266.20**	**312087.56**
4	Providing and laying in position Cement Concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machinery, curing, and all the other appurtenances required to complete the work as per technical specifications. Mix 1:2:4 Using 20 mm nominal size graded crushed coarse aggregates(KPWD 2023-24, Volume-1, Item No.2.1.6, Page No.15)								
	Basic Rate	**6243.00**							
	Area weightage 10%	624.30							
	Total Rate	**6867.30**							
	Coping concrete								
	2nd cross from Jalageramma Temple road								
	LHS		2	200.00	0.10	0.10	4.00		
		Cum				**Total**	**4.00**	**6867.30**	**27469.20**
5	Providing and laying in position Cement Concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machinery, curing, and all the other appurtenances required to complete the work as per technical specifications. Mix 1:4:8 Using 40 mm nominal size graded crushed coarse aggregates (KPWD 2023-24, Volume-1, Item No.2.1.2, Page No.15)								
	Basic Rate	**5664.00**							
	Area weightage 10%	566.40							
	Total Rate	**6230.40**							
	For RCC drain								
	1st cross from Jalageramma Temple road								
	LHS		1	203.00	1.05	0.10	21.32		
			1	30.00	0.90	0.10	2.70		
	RHS		1	203.00	1.05	0.10	21.32		
			1	30.00	0.90	0.10	2.70		
	2nd cross from Jalageramma Temple road								
	RHS		1	200.00	1.05	0.10	21.00		
	3rd cross from Jalageramma Temple road								
	LHS		1	200.00	1.05	0.10	21.00		

Sl No.	Description of Work	Unit	Nos	Dimensions			Qty	Rate	Amount
				L (m)	B (m)	D (m)			
	RHS		1	200.00	1.05	0.10	21.00		
		Cum				**Total**	**111.03**	**6230.40**	**691761.31**
6	Providing and laying in position Cement Concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necessary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates(KPWD 2023-24, Volume-1, Item No.2.4.2, Page No.16)								
	Basic Rate	**6323.00**							
	Add Form work 5%	316.15							
		6639.15							
	Area weightage 10%	663.92							
	Total Rate	**7303.07**							
	New RCC Drain								
	Drain Raft								
	1st cross from Jalageramma Temple road								
	LHS		1	203.00	0.90	0.15	27.41		
			1	30.00	0.65	0.10	1.95		
	RHS		1	203.00	0.90	0.15	27.41		
			1	30.00	0.65	0.10	1.95		
	2nd cross from Jalageramma Temple road								
	RHS		1	200.00	0.90	0.15	27.00		
	3rd cross from Jalageramma Temple road								
	LHS		1	200.00	0.90	0.15	27.00		
	RHS		1	200.00	0.90	0.15	27.00		
	Drain Wall								
	1st cross from Jalageramma Temple road								
	LHS		2	203.00	0.15	0.75	45.68		
			2	30.00	0.10	0.60	3.60		
	RHS		2	203.00	0.15	0.75	45.68		
			2	30.00	0.10	0.60	3.60		
	2nd cross from Jalageramma Temple road								
	RHS		2	200.00	0.15	0.75	45.00		
	3rd cross from Jalageramma Temple road								
	LHS		2	200.00	0.15	0.75	45.00		
	RHS		2	200.00	0.15	0.75	45.00		
		Cum				**Total**	**373.26**	**7303.07**	**2725942.04**
7	Supplying, fitting and placing TMT FE 550 / 550D Steel Reinforcement including cost of all materials, machinery, labour, cleaning, straightening, cutting, bending, hooking, laping/welding joints, tying with binding wire / soft annealed steel wire and other ancilary operations complete as per drawing and technical specification. All other type of structures (KPWD 2023-24, Volume-1, Item No.2.11 (h), Page No.18)								
	Basic Rate	**79011.00**							
	Area weightage 10%	7901.10							
	Total Rate	**86912.10**							
	New RCC Drain								

Sl No.	Description of Work	Unit	Nos	Dimensions			Qty	Rate	Amount
				L (m)	B (m)	D (m)			
	Consider 60kg/cum		1	373.26		60.00	22395.60		
		Kgs					**22395.60**		
		Tonne				**Total**	**22.40**	**86912.10**	**1946448.63**
8	Providing and laying 100mm thick pre-cast cover slabs over Road side drains / utility ducts / Rain water harvesting pit of width not exceeding 1000 mm using M20 concrete reinforced with TMT bars Fe 550 @ 6kg/m2, slabs jointed in CM 1:3 proportion and nicely finished Including providing holes in the Cover slabs wherever necessary for easy drain age of surface water including of labour, materials, scaffolding, usage of machinery, curing, lead and lift charges etc, Complete. (KPWD 2023-24, Volume-2, Item No.17.14, Page No.177)								
	Basic Rate	**1170.00**							
	Area weightage 10%	117.00							
	Total Rate	**1287.00**							
	Missing / Broken Slabs Qty vide above It No.01						280.80		
	For RCC Drain								
	1st cross from Jalageramma Temple road								
	LHS		1	50.00	0.90		45.00		
	RHS		1	100.00	0.90		90.00		
	2nd cross from Jalageramma Temple road								
	RHS		1	30.00	0.90		27.00		
	3rd cross from Jalageramma Temple road								
	LHS		1	30.00	0.90		27.00		
		Sqm				**Total**	**469.80**	**1287.00**	**604632.60**
9	Providing and fixing pre cast solid cement concrete kerb stones made out of M20 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete as directed by the Engineer in Charge of the work (Data Rate excluding GST)								
	Data Rate	**507.00**							
	Total Rate	**507.00**							
	Missing / damaged Kerbs Qty vide above It No.02						51.00		
				51.00m/0.45			113.00		
		Nos				**Total**	**113.00**	**507.00**	**57291.00**
10	Earth work in surface excavation by mechanical means for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenances required to complete the work. In all kinds of soils upto 300 mm depth (KPWD 2023-24, Volume-1, Item No.1.12, Page No.8)								
	Basic Rate	**95.00**							
	Area weightage 10%	9.50							
	Total Rate	**104.50**							
	Road cutting/damaged portion								
	1st cross from Jalageramma Temple road		20	15.00	1.20	0.20	72.00		
			14	5.00	0.50	0.20	7.00		

Sl No.	Description of Work	Unit	Nos	Dimensions			Qty	Rate	Amount
				L (m)	B (m)	D (m)			
	2nd cross from Jalageramma Temple road		19	18.00	1.00	0.20	68.40		
	3rd cross from Jalageramma Temple road		29	10.00	1.50	0.20	87.00		
		Cum				**Total**	**234.40**	**104.50**	**24494.80**
11	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density. (KPWD 2023-24, Volume-3, Item No.4.17, Page No.26)								
	Basic Rate	**2559.00**							
	Area weightage 10%	255.90							
	Total Rate	**2814.90**							
	Road cutting/damaged portion								
	1st cross from Jalageramma Temple road		20	15.00	1.20	0.15	54.00		
			14	5.00	0.50	0.15	5.25		
	2nd cross from Jalageramma Temple road		19	18.00	1.00	0.15	51.30		
	3rd cross from Jalageramma Temple road		29	10.00	1.50	0.15	65.25		
		Cum				**Total**	**175.80**	**2814.90**	**494859.42**
12	Providing and applying primer coat with SS1 grade Bitumen Emulsion on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.70 kg/m2 using mechanical means (KPWD 2023-24, Volume-3, Item No.5.1, Page No.31)								
	Basic Rate	**41.00**							
	Area weightage 10%	4.10							
	Total Rate	**45.10**							
	Road cutting/damaged portion								
	1st cross from Jalageramma Temple road		20	15.00	1.20		360.00		
			14	5.00	0.50		35.00		
	2nd cross from Jalageramma Temple road		19	18.00	1.00		342.00		
	3rd cross from Jalageramma Temple road		29	10.00	1.50		435.00		
		Sqm				**Total**	**1172.00**	**45.10**	**52857.20**
13	Providing and laying Dense Graded Bituminous Macadam with 40/60 TPH capacity hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 4.0 per cent by weight of total mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification clause No. 505 complete in all respects. (KPWD 2023-24, Volume-3, Item No.5.10(C), Page No.34)								
	Basic Rate	**8779.00**							
	Area weightage 10%	877.90							
	Total Rate	**9656.90**							
	Road cutting/damaged portion								
	1st cross from Jalageramma Temple road		20	15.00	1.20	0.05	18.00		
			14	5.00	0.50	0.05	1.75		
	2nd cross from Jalageramma Temple road		19	18.00	1.00	0.05	17.10		
	3rd cross from Jalageramma Temple road		29	10.00	1.50	0.05	21.75		
		Cum				**Total**	**58.60**	**9656.90**	**565894.34**

Sl No.	Description of Work	Unit	Nos	Dimensions			Qty	Rate	Amount
				L (m)	B (m)	D (m)			
14	Providing and applying tack coat with RS1 Bituminous Emulsion using emulsion pressure distributor at the rate of 0.20 kg/m2 on the prepared bituminous surface cleaned with mechanical broom (KPWD 2023-24, Volume-3, Item No.5.3, Page No.31)								
	Basic Rate	**12.00**							
	Area weightage 10%	1.20							
	Total Rate	**13.20**							
	1st cross from Jalageramma Temple road		1	203.00	6.00		1218.00		
			1	30.00	4.00		120.00		
	2nd cross from Jalageramma Temple road		1	200.00	6.00		1200.00		
	3rd cross from Jalageramma Temple road		1	200.00	7.00		1400.00		
		Sqm				**Total**	**3938.00**	**13.20**	**51981.60**
15	Providing and laying Bituminous Concrete with 40/60 TPH capacity hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 5.4 percent of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 507 complete in all respects(KPWD 2023-24, Volume-3, Item No.5.16(c), Page No.31)								
	Basic Rate	**10954.00**							
	Area weightage 10%	1095.40							
	Total Rate	**12049.40**							
	1st cross from Jalageramma Temple road		1	203.00	6.00	0.04	48.72		
			1	30.00	4.00	0.04	4.80		
	2nd cross from Jalageramma Temple road		1	200.00	6.00	0.04	48.00		
	3rd cross from Jalageramma Temple road		1	200.00	7.00	0.04	56.00		
		Cum				**Total**	**157.52**	**12049.40**	**1898021.49**
16	Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 g/m2 area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35:2015.The finished surface to be level, uniform and free from streaks and holes(KPWD 2023-24, Volume-3, Item No.8.15, Page No.67)								
	Basic Rate	**530.00**							
	Area weightage 10%	53.00							
	Total Rate	**583.00**							
	Side Line								
	1st cross from Jalageramma Temple road		2	210.00	0.10		42.00		
	2nd cross from Jalageramma Temple road		2	200.00	0.10		40.00		
	3rd cross from Jalageramma Temple road		2	200.00	0.10		40.00		
		Sqm				**Total**	**122.00**	**583.00**	**71126.00**
17	Loading and Unloading of Stone Boulder/Stone aggregates/Sand/Kankar/Moorum. (Tipper 5.5 m3) (KPWD 2023-24, Volume-3, Item No.1.1(a), Page No.5)								
	Basic Rate	**135.00**							
	Area weightage 10%	13.50							
	Total Rate	**148.50**							
	Qty same as vide Item No.3						1172.38		
	Qty same as vide Item No.10						234.40		
		Cum				**Total**	**1406.78**	**148.50**	**208906.83**

Sl No.	Description of Work	Unit	Nos	Dimensions			Qty	Rate	Amount
				L (m)	B (m)	D (m)			
18	Cost of Haulage Excluding Loading and Unloading Taking output 10 t load and lead 10 km = 100 t.km (KPWD 2023-24, Volume-3, Item No.1.4(i) a, Page No.5)								
	Basic Rate	**12.00**							
	10km lead=12x10	120.00							
	Area weightage 10%	12.00							
	Total Rate	**132.00**							
	Side Line								
	Qty same as vide Item No.3						1172.38		
	Qty same as vide Item No.10						234.40		
		Cum				**Total**	**1406.78**	**132.00**	**185694.96**
								Total Amount Rs.	**1,00,78,022.47**
								Add GST @ 18%	**18,14,044.05**
								Add PMC charges @ 1%	**1,00,780.22**
								Add Tender premium @ 5%	**5,03,901.12**
								Miscellaneous and Rounding off	**3,252.13**
								Grand Total Amount Rs.	**1,25,00,000.00**

CERTIFICATE

1. The above Estimate has been prepared as per 2023-24 KPWD SR Vol- 1, 2 & 3 of , Data Rate
2. Certified that only required items are incorporated in the estimate.
3. Certified that the work is essential and required.
4. Certified that the work has been inspected and found to be necessary.
5. This area comes under the BBMP limits.

Assistant Engineer
Ward No-11

Asst Executive Engineer
Kodigehalli Sub division
BBMP

Executive Engineer
Byatarayanapura Division
BBMP

ADMINISTRATIVE SANCTION
Accorded for Rs. 125.00 Lakhs
Head of A/c. 05-330502 (P2337 & P3863)
Div. Ref. No. 67 Date. 12/08/25
AE/DM EE(BTP) BBMP

Technical Sanction
Accorded For RS125-W/archy
Head of A/C. ~~1&S~~ P2337
CER NO :...1&S..... Dt:.03.02.2025

NAME OF WORK: IMPROVEMENTS OF ROADS AND DRAINS AT C.P. LAYOUT AND DEVINAGAR AND SURROUNDING AREA IN WARD NO.11, KODIGEHALLI SUB DIVISION